

§ 80.227

(iv) Harmful interference is not caused to stations operating in accordance with the International Radio Regulations.

[54 FR 10009, Mar. 9, 1989, as amended at 62 FR 40306, July 28, 1997; 68 FR 46966, Aug. 7, 2003; 73 FR 4482, Jan. 25, 2008]

§ 80.227 Special requirements for protection from RF radiation.

As part of the information provided with transmitters for ship earth stations, manufacturers of each such unit must include installation and operating instructions to help prevent human exposure to radiofrequency (RF) radiation in excess of the RF exposure guidelines specified in § 1.1307(b) of the Commission's Rules.

[53 FR 28225, July 27, 1988]

§ 80.229 Special requirements for automatic link establishment (ALE).

Brief signalling for the purposes of measuring the quality of a radio channel and thereafter establishing communication shall be permitted within the 2 MHz–30 MHz band. Public coast stations providing high seas service are authorized by rule to use such signalling under the following conditions:

(a) The transmitter power shall not exceed 100 W ERP;

(b) Transmissions must sweep linearly in frequency at a rate of at least 60 kHz per second, occupying any 3 kHz bandwidth for less than 50 milliseconds;

(c) The transmitter shall scan the band no more than four times per hour;

(d) Transmissions within 6 kHz of the following protected frequencies and frequency bands must not exceed 10 µW peak ERP:

(1) Protected frequencies (kHz)

| | | | | |
|--------|--------|---------|---------|---------|
| 2091.0 | 4188.0 | 6312.0 | 12290.0 | 16420.0 |
| 2174.5 | 4207.5 | 8257.0 | 12392.0 | 16522.0 |
| 2182.0 | 5000.0 | 8291.0 | 12520.0 | 16695.0 |
| 2187.5 | 5167.5 | 8357.5 | 12563.0 | 16750.0 |
| 2500.0 | 5680.0 | 8364.0 | 12577.0 | 16804.5 |
| 3023.0 | 6215.0 | 8375.0 | 15000.0 | 20000.0 |
| 4000.0 | 6268.0 | 8414.5 | 16000.0 | 25000.0 |
| 4177.5 | 6282.0 | 10000.0 | | |

(2) Protected bands (kHz)

4125.0–4128.0
8376.25–8386.75
13360.0–13410.0
25500.0–25670.0

47 CFR Ch. I (10–1–08 Edition)

(e) The instantaneous signal, which refers to the peak power that would be measured with the frequency sweep stopped, along with spurious emissions generated from the sweeping signal, must be attenuated below the peak carrier power (in watts) as follows:

(1) On any frequency more than 5 Hz from the instantaneous carrier frequency, at least 3 dB;

(2) On any frequency more than 250 Hz from the instantaneous carrier frequency, at least 40 dB; and

(3) On any frequency more than 7.5 kHz from the instantaneous carrier frequency, at least $43 + 10\log_{10}$ (peak power in watts) db.

[62 FR 40307, July 28, 1997]

Subpart F—Equipment Authorization for Compulsory Ships

§ 80.251 Scope.

(a) This subpart gives the general technical requirements for certification of equipment used on compulsory ships. Such equipment includes automatic-alarm-signal keying devices, survival craft radio equipment, watch receivers, radar equipment and Ship Security Alert System (SSAS) equipment.

(b) The equipment described in this subpart must be certificated.

(c) The term *transmitter* means the transmitter unit and all auxiliary equipment necessary to make this unit operate as a main or emergency transmitter in a ship station at sea. Each separate motor-generator, rectifier, or other unit required to convert the ship primary power to the phase, frequency, or voltage necessary to energize the transmitter unit is considered a component of the transmitter.

(d) *Average ship station antenna* means an actual antenna installed on board ship having a capacitance of 750 picofarads and an effective resistance of 4 ohms at a frequency of 500 kHz, or an artificial antenna having the same electrical characteristics.

[51 FR 31213, Sept. 2, 1986, as amended at 63 FR 36606, July 7, 1998; 68 FR 46966, Aug. 7, 2003; 73 FR 4483, Jan. 25, 2008]